

Friday, October 21, 2016 3:03:43 PM

Page 1

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 9/23/2016 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 10/24/2016 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: DAS 21 Date: OCT 26 2016 Tooling: _____ Date: _____
QC: 9-59 Date: _____ SPC (Y/N): _____ Date: _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Description Work Order Deviation				Disposition																																																													
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 152291

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152291

Page 2

Item ID: D350-794-141

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Tank Assembly

Start Date: 9/23/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/24/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-794-141								
	Location: _____								
	PPP Rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							
Quality Control									

DAS
21
9-89
JAN 1 2 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Page 1

Work Order ID: 152291

152291

Parent Item: D350-794-141

D350-794-141

Parent Item Name: Tank Assembly

Start Date: 9/23/2016

Required Date: 10/24/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.04.04 new issue DD VERF:EC IPP REV:B
12.04.26 ECN 12-571 DD VERF:EC IPP REV:C 15.01.15 as
per CHG005/ECN14-666 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4464-041		Manufactured	No			110	Each	0.0000	1	1			
-----------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

D4464-041

Fuel Tank Assembly

D4002-041		Manufactured	No			110	Each	5.0000	1	1			
-----------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

D4002-041

Aux Tank Drain Hose Assy, Fwd

Location

Loc Qty

Loc Code

ST211

5

116043

1

139225

2

144479

2

D4002-043		Manufactured	No			110	Each	4.0000	1	1			
-----------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

D4002-043

Aux Tank Drain Hose Assy, Aft

Location

Loc Qty

Loc Code

ST211

4

130064

2

143794

2

MS20822-3D		Purchased	No			110	Each	9.0000	2	2			
------------	--	-----------	----	--	--	-----	------	--------	---	---	--	--	--

MS20822-3D

Elbow

Location

Loc Qty

Loc Code

ST305

9

m134676

4

m135704

5

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Work Order ID: 152291

152291

Parent Item: D350-794-141

D350-794-141

Parent Item Name: Tank Assembly

Start Date: 9/23/2016

Required Date: 10/24/2016

Start Qty: 1.00

Required Qty: 1.00

AN816-6D	Purchased	No	110	Each	3.0000	1	1	DEC 12 2016
AN816-6D						**		
Nipple-M-6Flare -1/4NPT								
DAS 28 9-89								
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
			ST325	3				
			M132767	3				
MS20822-8D	Purchased	No	110	Each	2.0000	1	1	DEC 12 2016
MS20822-8D						**		
ELBOW								
DAS 28 9-89								
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
			ST304	2				
			m133577	2				
D4009-041	Manufactured	No	110	Each	9.0000	2	2	DEC 12 2016
D4009-041						**		
Bonding Braid								
DAS 28 9-89								
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
			ST071	9				
			145556	9				
D4008-041	Manufactured	No	110	Each	9.0000	1	1	DEC 12 2016
D4008-041						**		
Fuel Filler Splash Guard Assembly								
DAS 28 9-89								
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
			ST243	9				
			137305	9				
TBA28B	Purchased	No	110	Each	0.0000	3	3	DEC 12 2016
TRA28R						**		
CABLE TIE FASTENER use D3600-1								
DAS 28 9-89								

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Shop Packet Print

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY																																																												
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
OTHER : _____																																																															

Picklist Print

Friday, October 21, 2016 3:03:43 PM

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Work Order ID: 152291

152291

Parent Item: D350-794-141

D350-794-141

Parent Item Name: Tank Assembly

Start Date: 9/23/2016

Required Date: 10/24/2016

Start Qty: 1.00

Required Qty: 1.00

TY25MX

Purchased

No

110

Each

838.0000

1

1

TY25MX

TIE WRAP

**

DEC 12 2016

Location

Loc Qty

Loc Code

st572

838

115695

838

DAS
28
9-89

DAS
6
9-89

DAS
27
9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

REFERENCE ONLY

DART AEROSPACE LTD.

IIN-D350-794

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Qty -111	Qty -013	Qty -121	Qty -023	Qty -141	Part Number	Superseded Part Numbers	Description
X					D350-794-111		AUXILIARY FUEL TANK (AS 350 SERIES)
1	X				D350-794-013		AUXILIARY FUEL TANK PROVISIONS (AS 350 SERIES)
		X			D130-794-121		AUXILIARY FUEL TANK (EC 130 SERIES)
		1	X		D130-794-023		AUXILIARY FUEL TANK PROVISIONS (EC 130 SERIES)
1		1		X	D350-794-141		TANK ASSEMBLY
				1	D4464-041		TANK ASSEMBLY
	1		1		D4022-041	A8150-B1-JCA	FUEL TRANSFER PUMP ASSEMBLY
				1*	D4023-3		FUEL CAP
	1		1		D4002-5	JCA-M47-2-13	SUPPLY HOSE – FROM AUX TANK
	1		1		D4003-047	JCA-M47-2-16	FUEL PUMP INLET PIPE
	1		1		D4002-7	JCA-M47-2-25	SUPPLY HOSE – PUMP TO MAIN TANK FILLER NECK
				1	D4002-041	JCA-M47-1-13	DRAIN HOSE ASSEMBLY – FRONT
				1	D4002-043	JCA-M47-1-16	DRAIN HOSE ASSEMBLY – REAR
				2	MS20822-3D		UNION
	1		1		AN832-6D		BULKHEAD UNION
				1	AN816-6D		STRAIGHT FITTING
	2		2		AN924-6D		NUT (ALTERNATE AS5178D06)
	2		2		NAS1149D0963J		WASHER
				1	MS20822-8D		90° FITTING
	2		2		AN815-6D		UNION
	2		2		MS29512-06		ORING
	1		1		D4022-3	05-00021	FUEL PUMP MOUNTING BRACKET
	2		2		AN3-4A		BOLT
	2		2		MS21042-3		NUT
	2		2		AN970-3		WASHER
	1		1		D4008-043	JCA-M47-2-29	FUEL PUMP SPLASH GUARD
	1		1		D4004-7	N3	HOSE CLIP
				2	D4009-041	JCA-M47-4-01	BONDING BRAID
				1	D4008-041	JCA-M47-2-26	AUXILIARY TANK FILLER SPLASH GUARD
	4		4		AN525-10R6		SCREW
	1		1		D4001-3	AN832-6D-JCA	BULKHEAD FITTING – MODIFIED
							VENT ASSEMBLY PARTS
	2		2		MS21919WDG-8		CLAMP
	1		1		D4003-11	JCA-M47-2-21	VENT PIPE – TANK
			1		D4027-041	JCA-M47-2-20	VENT CLAMP ASSEMBLY
	1		1		D4003-049	JCA-M47-2-17	VENT PIPE – TANK
	1		1		D4027-043	JCA-M47-2-35	VENT CLAMP ASSEMBLY
	1		1		D4063-3	193-8	VENT HOSE
	2		2		2000-8S		HOSE CLAMP
	1		1		NAS43DD3-32N		SPACER
	1		1		MS35207-267		SCREW
	2		2		MS35207-264		SCREW
	3		3		NAS1149D0332J		WASHER
	3		3		MS21042-3		NUT
				3	TBA28B		CABLE TIE FASTENER
				1	TY25MX		TIE WRAP
	1		1		MS21919WDG-6		CLAMP (RUBBER REMOVED)
	1		1		D4009-041	JCA-M47-4-01	BONDING BRAID ASSEMBLY

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Revision: **G**

Date: 14.08.20